

function of the shades selected for the bodies 1. These racks may be prepared outside the paint spray workshop, the distribution of the shades in the different tanks 50 and 50' being predetermined as a function of the envisaged use of the installation.

5           In the case of coating products composed of two components, the base of the products may be provided to be transported in the principal tanks 50 and 50', while the catalyst, which is identical whatever the base considered, is conducted via a conduit 40K, shown solely in Figure 2, at the level of station 40. In this way, when the tank 30 is being filled with base from tank 50, a filling of  
10 catalyst may take place from station 40.

          In a variant, the conduit 40K supplying catalyst may be disposed in the arm of each robot, as represented in dashed-and-dotted lines for the robot 10 in Figure 2.

          In any case, the base and the catalyst are mixed just before the product  
15 contained in the tank 30 is used.

          In the second embodiment of the invention shown in Figures 3 and 4, the elements similar to those of the first embodiment bear identical references, increased by 100. In this embodiment, bodies 101 are conveyed by toboggans 103 displaced by a conveyor 102. Robots 110 to 117 are disposed on either side  
20 of this conveyor and are equipped with sub-assemblies 160 to 167 each comprising an atomizer 120 to 127 and a tank 130 to 137, each sub-assembly being removably mounted at the end of the arm of a robot. As previously, the principal tanks 150 and 150' are conducted by conveyors 152 and 152' along the conveyor 102.

25           Between the robots 110 and 112, there is installed a station 140 for temporarily storing sub-assemblies 160 and equivalent, this station 140 being

intended for the preparation of sub-assemblies provided to be mounted on the robots 110 and 112.

As is more particularly visible in Figure 4, the station 140 defines four housings 140a, 140b, 140c and 140d for receiving sub-assemblies 160 and 162.

5 More precisely, housings 140a and 140b are intended for receiving the sub-assemblies to be mounted on the robot 110, while housings 140c and 140d are intended for the sub-assemblies to be mounted on the robot 112. The housing 140a effectively contains a sub-assembly 160', while housing 140b is ready to receive the sub-assembly 160 mounted at the end of the robot 110. In the same  
10 way, housing 140c contains a sub-assembly 162' intended to be mounted on the robot 112, while housing 140d is empty and ready to receive the sub-assembly 162 mounted on the robot 112. The sub-assemblies 160' and 162' respectively comprise atomizers 120' and 122' and tanks 130' and 132' similar to those of sub-assemblies 160 and 162.

15 The station 140 is equipped with an air supply conduit 140A, a solvent supply conduit 140S and a drain conduit 140p.

With the foregoing in mind, it will be understood that the robots 110 and 112 alternately take one of the sub-assemblies 160 or 162 available in the station 140, one sub-assembly being able to be filled while the other sub-  
20 assembly is being used on one of the robots.

Such filling takes place thanks to the tank 150 which is conducted by the conveyor 152 up to the level of the station 140, the tank 150 being provided with a means 150a for quick connection with connection means 140e borne by a plate 140f capable of movements of translation, represented by arrow  $F_2$  in  
25 Figure 4, being controlled by a jack 140g which may be hydraulic, pneumatic or electric.

The connection means 140e are connected by flexible pipes (not shown) to the sub-assemblies 160 and 162 present in the housings 140a to 140d.

It is possible to fill the tanks 130 and 132 of the sub-assemblies 160 and 162 when they are in place in the station 140 and before the robots 110 and 112 take over these sub-assemblies with a view to spraying the coating products on the bodies 101.

The tank 150 may be supplied with air for pressurization or with air for actuating a stirrer from the conduit 140A of the station 140 when the plate 140f is in contact with the tanks 150, in which case appropriate connecting means are provided.

Another station 141, similar to station 140, is provided between the robots 114 and 116 for preparing the sub-assemblies 164 and 166, and particularly for cleaning the atomizers 124 and 126 and cleaning/filling the tanks 134 and 136. Tank 150 is conducted towards station 141 after its connection to station 140.

On the opposite side of the conveyor 102 there are provided two stations 140' and 141' for temporary storage and cleaning/filling of the sub-assemblies 161, 163, 165 and 167. Principal tanks 150' are conducted by a conveyor 152' up to the vicinity of the stations 140' and 141' for filling the tanks 131, 133, 135 and 137.

As previously, loading zones 153 and 153' and zones 154 and 154' for unloading the conveyors 152 and 152' are provided, racks 155 and 155' allowing temporary storage of the tanks 150 and 150', full or empty, in the vicinity of zones 153, 153', 154 and 154'.

Manipulation of the principal tanks 50, 50', 150 and 150' between the racks and the loading/unloading zones may be effected by a manipulator robot